



The Raleigh Amateur Radio Society's **EXCITER**

GET INVOLVED

- RARS General Membership meeting: Second Tuesday of the month.
- The RARS net meets every night except Saturday @ 8 p.m. on 146.640.
- The RARS Technical & Trader's net: Saturdays @ 8:00 PM on 146.64.
- RARS meets for a monthly dinner on the First Tuesday of each month.



PUBLIC SERVICE EVENTS

Interested in helping? Visit
<http://www.rars.org/public-service.php>

frequently for our 2018
ham public service
schedule.

RARS General Meeting

Topic: Satellite Communications

Presented by Tucker McGuire, W4FS

Date: September 11, 2018

Time: Meeting at 7:30PM

Informal gathering and refreshments from 7 - 7:30 p.m.

Where: Ridge Road Baptist Church. 2011 Ridge Rd., Raleigh

New HAM meeting, 6:00 p.m. before member meeting

Analysis of Amateur Radio by the Numbers

By Carl Davis, W8WZ

August 2018

Unlike most ham radio operators, I am not employed in a high tech profession. In fact, my only formal electronics training was the Novice License Class I took at age 14. In my professional life in the philanthropic and financial service sectors I spend most of my time moving money, so my formal education revolves around that skillset. That means I spend a lot of time looking at numbers to see what stories they tell and what opportunities they present. I recently thought it would be interesting to look at some numbers as they relate to Amateur Radio as if it were a potential investment and see what stories those numbers might tell and what opportunities they may present.

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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the amateur radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in times of disaster, emergency, or civic needs; to educate members in radio technique, and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (www.rars.org).

Exciter

The Exciter is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at www.rars.org. Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The Exciter welcomes articles, advertisements, and other contributions. To submit a piece to the newsletter, please contact the Editor. The Editor reserves the right to edit any and all pieces. The submission deadline for each month's Exciter is the third Friday of the preceding month. All submissions must be final. Drafts are not accepted.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Tom Lewis, N4TL, editor (editor@rars.org)

For Your Information

RARS General Meeting

Date: Second Tuesday of each month

Location: Ridge Road Baptist Church 2011
Ridge Road Raleigh, NC, 27607

Time: People begin arriving at 7 p.m. The
meeting officially begins at 7:30 p.m.

RARS Monthly Dinner

All members and guests are welcome to
the monthly (first Tuesday) RARS Supper,
6:30PM, at the Golden Corral Restaurant,
6129 Glenwood Ave., Raleigh. Informal and
Dutch, just bring your appetite and best rag to
chew. 73, Chuck, K4HF

RARS Repeaters in Raleigh

146.640 and 444.525

Join us for the nightly RARS net at 8 p.m.
on the 146.640 repeater. All hams holding a
Technician class license or higher are invited
to check in. We welcome both RARS and non-
RARS members to the net.

There is a net Listing on the RARS web-
site click here. <http://www.rars.org/nets.php>

VE Testing

The RARS VEs will accept walk-in testing in
February, May, August and November at
5:30PM, prior to RARS membership meetings
at Ridge Road Baptist Church; the RARSfest
in April; the Cary Swapfest in July; the JARS-
Fest in November; and following RARS license
classes. Please bring a photo ID, your origi-
nal and a copy of your current license, your
\$14 exam fee, and any valid CSCEs that prove
passing elements beyond that of your current
license. Visit www.rars.org for more infor-
mation.

August 2018 RARS Net Summary

Checkins: 501
Traffic Brought/Passed: 14/13
Minutes: 1014
Sessions: 31

Virginia Enzor NC4VA
RARS Net Manager

RARS Auction

The October 9th meeting will be the RARS Auc-
tion. It's time to think about what you could bring
to sell. When we closer to that date, PLEASE reg-
ister your items on line. That allows me to print
labels before the auction. It saves a lot of work at
the auction.

73 Tom N4TL

Petition Drive to Save WWV/WWVH

There have been a lot of emails about Petitions to
Save WWV/WWVH. Here is a link to CQ magazine
with information about the issue.

<http://cqnewsroom.blogspot.com/>

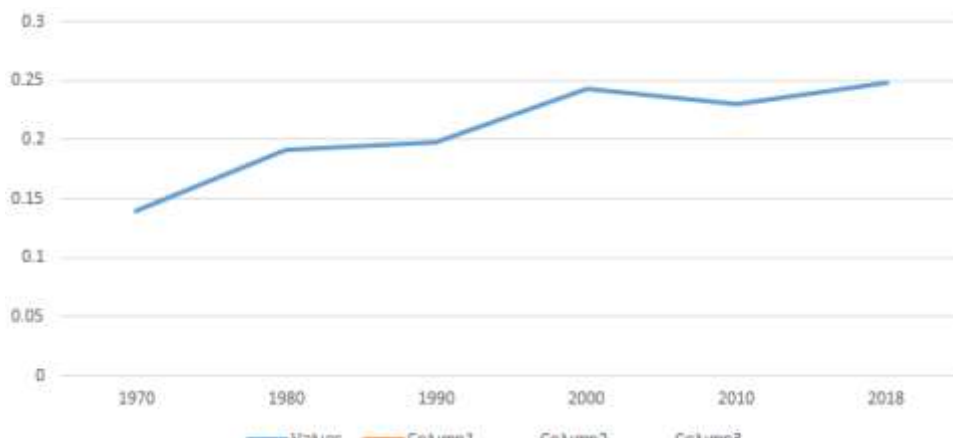
President's Message continued

There are more licensed Amateur Radio Operators in the United States now than at any other time in history! Wikipedia reports that there are currently 801,424 hams in the United States. That means 0.248% of the national population are hams. It is good to look at the total number of hams but it is even better to consider what percentage of the population are hams over a period of years. Looking at that trend is important because it will show us if the number of hams is simply growing because our population is growing or if a higher percentage of the population is interested in our hobby than before. So to answer that question let us look at the following data for the past 48 years which can be found at www.clearskyinstitute.com on arrl.org and curtesy of the US Census.

YEAR	HAMS	POPULATION	PERCENT-AGE
1970	285,000	203 Million	0.14
1980	433,000	225 Million	0.192
1990	494,000	249 Million	0.198
2000	677,000	279 Million	0.243
2010	696,041	309 Million	0.23
2018	801,424	327 Million	0.248

This is very good news for Amateur Radio. Not only are our absolute numbers rising but market share is also increasing. In 1970 only 0.14% of Americans were hams. Today 0.248% of Americans are hams. That is an increase of 77.14%.

LINE GRAPH SHOWING % of AMERICANS WHO ARE HAMS BY YEAR

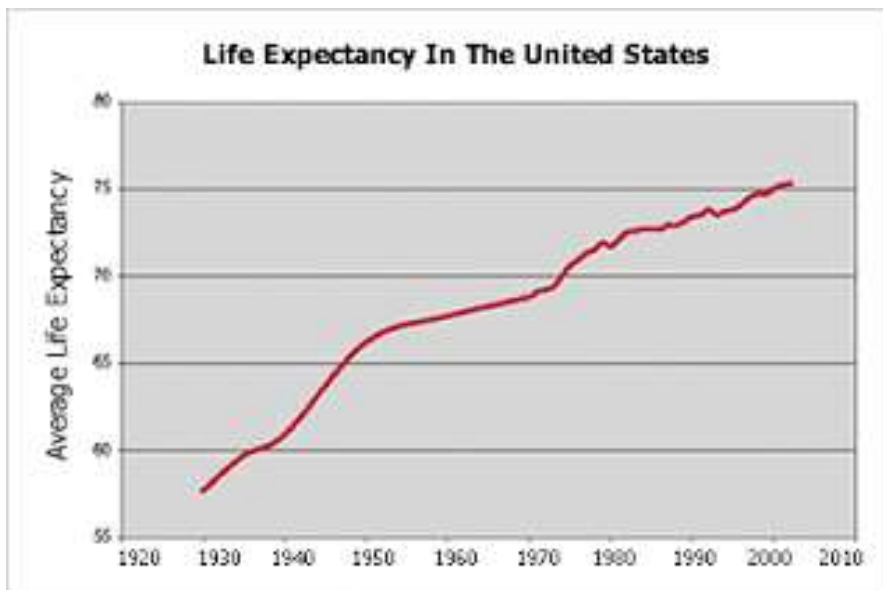


The chart also shows that many people became hams in the 1970s and in the 1990s. That makes sense because in the 1970s many people entered the ham radio hobby after being introduced to radio through the CB craze of that era and in the 1990s many people entered ham radio when the

President's Message continued

Morse Code requirements were relaxed. In addition to that, our hobby has continued to grow since then. I think the lower cost of ham radio gear available today is helping to fuel that growth. Doubtless there are many factors coming together to result in the growth of our hobby from 285,000 hams in 1970 to 801,424 hams today. The 48-year trend line shows a very healthy rate of steady growth and increasing market share that any company would be happy to have.

I was unable to find good data about the age that hams are when they are first licensed. However, I observe anecdotally that the average age of new hams today is higher than it used to be. When I was licensed as a teenager, many other hams were my age. Today it seems rare to find teenagers in our hobby and most of the people in our club's licensing classes are adults. Of course, without good data to analyze, that is just one person's observation and may be inaccurate. That said, I think it is safe to say that the average age of a ham is higher now than it used to be. Of course the entire United States population is aging. In 1970 the median age in the United States was 28.1 years. Today it is 37.8 years. That is an increase of 34.52%. Acknowledging the aging of the ham population can lead to doom and gloom thinking. However, it is also important to realize that the average life expectancy has also increased drastically over the years. Consider that when The Social Security Act was signed by President Roosevelt on 14 August, 1935 the life expectancy for men in the United States was 59.3 years. President Roosevelt himself died at age 63 and was not considered to have died young. Today the life expectancy for a male in the United States is 77 years. That is a 29.85% increase. Therefore, an older ham today may actually have more years of hamming in front of him than a younger ham did a generation ago! Rising life expectancy can negate the otherwise negative impact of an aging ham radio population. This is especially true since we are gaining many new hams each year. The hobby is not in danger of dying out.



President's Message continued

Also, as new hams enter our hobby as adults it is reasonable to suppose that they will have more money to spend on radios than new teenage hams did in years past and since ham radio gear is less expensive now that means that financial restraints on participation in our hobby by new hams can be reasonably supposed to be at an all-time low. Let us consider the cost of new entry level HF radios. In 1970 a Heathkit HW101 kit cost \$399.00. Adjusted for inflation that cost is equivalent to \$1,993.38 in 2018 dollars. Today a brand new fully built Yaesu FT 450 can be had for \$739.00. That illustration shows ham radio gear to be 63% cheaper today than it was in 1970. Also the quality of today's gear is much higher when you compare the specs of the HW101 to those of the FT450.

All these trends combine to make me very bullish about Amateur Radio. There is one trend that is concerning however. That is the urbanization of our society. In 2010 (our most recent census) 80.7% of Americans lived in an urban setting. In 1970 that number was only 73.6%. I suspect the 2020 census will show that number even higher. This is concerning because it is harder to operate a ham radio in an urban setting than it is in a rural or even suburban one. Lack of antenna space and higher RF noise floors make urban operating hard. To see how ham radio will likely look in an era of increased urbanization we would do well to look at how Amateur Radio already looks in the highly urbanized countries of Europe and Asia. In those markets much, if not most, ham radio operation is conducted at club stations rather than at home stations. I think we will see that trend develop in our country as well. I also think that an increased number of American hams will take advantage of the miniaturization of our transceivers and power supplies and chiefly operate their stations as portable stations while on picnics or campouts instead of from home.

Therefore, if Ham Radio was a sector I could invest in, I would do so. If I was looking to pick specific winners within that sector I would invest in Ham Radio clubs in urban areas (where the population growth is strongest) that either have or are working on plans for a club station to allow their members who live in apartments, condos or homes controlled by HOAs to operate easily and in clubs that are investing in remote stations in areas with low noise floors that their members can access remotely from their urban homes. I would also invest in companies that create gear used for portable operation more than I would in companies that create gear for giant home stations because I think more ham radio stations in the future will be portable and fewer will be giant home stations.

I also think it is worthy to note that as the number of hams facing RF noise floor issues increases that will create a stronger market for a technological solution to RF noise. Historically, technology is developed to fix problems when there is a market strong enough to pay for the technological solution. When the number of hams (and other RF users) who are willing to pay for a technological solution to our urban RF noise floor issues grows strong enough, I have faith that Digital Signal Processing will advance to the point of offering solutions to us that do not currently exist. While I cannot imagine how antennas could be improved to work better in urban spaces, I have faith that technological advancements in the world of antenna design may also help solve these issues once there is a market willing to pay for that solution as well. Consider the rising popularity of magnetic

President's Message continued

loop antennas made practical by lower cost vacuum variable capacitors entering the market place and the fact that the newest offering from SteppIR is the “Urban Beam”. It is worth remembering that our thinking around antennas has not changed drastically since the end of World War Two. What other technology has remained so stagnant? I think we will see amazing technological innovation in that area once demand rises more. If I was looking to make riskier investments in the Amateur Radio Sector I would invest in companies doing research around advanced DSP and antenna design.

What does this mean for RARS? According to www.wakeupwakecounty.org “Wake County recently hit a new milestone... **1 million residents!** Wake County is growing by an average of 64 people each day (including births, deaths, and people moving), and has added 100,000 people in the last four years.”

If we consider that 0.248% of the US population are hams, then it is reasonable to think that of those new 100,000 residents about 248 of them are already hams. Anecdotally, as I looked around the RARS board room table last week I realized that the overwhelming majority of us on the RARS board were hams before we moved to Raleigh.

Additionally, there are 3,147 licensed hams in Wake County. RARS membership usually starts the year around 300 and ends the year around 400. We have been holding in that range for several years. Therefore, about 10% of Wake County hams are members of RARS (Of course this is a general over simplification, obviously many of our members are not residents of Wake County and we can find potential members in surrounding counties also. This simply shows that we are nowhere near reaching market cap in terms of membership!)

Currently, most of our new members come to us after taking their exam with our Volunteer Examiner Team and/or taking their licensing class from our Spring and Fall Technician Classes. Or, they come to us because they were already a ham and found our webpage after they moved to the area. If we were interested in growing our membership significantly, the fact that 90% of existing Wake County hams are not yet members, and that we can expect to have many new hams moving into our county each year would indicate that a potential growth market for RARS membership could be realized via intentional outreach to those people in addition to our work to license and engage new hams as even more of the population become interested in our hobby each year.

So, the next time you hear all of the “doom and gloom” talk about the best days of ham radio being behind us take time to think about the stories that the numbers are telling us. Look at Ham Radio from the perspective of an investor and be “long” on our hobby. There is good reason to be. The numbers say so!

73 Carl Davis, W8WZ

New HAM meeting, 6:00 p.m. before the member meeting

Tadd Torborg, KA2DEW, New Ham meeting Coordinator

The New Hams meeting is held every month before the regular RARS meeting. We'll try to start by 6pm. We try to address topics in a manner that will be of help to hams in their first year of operation.

There were about 10 people in the August 14, 2018 meeting, which isn't bad for August. Tadd KA2DEW and Doug N3LTV brought in power supplies and an HF radio. We hooked up a 13.8V switcher power supply to the HF radio and transmitted into a dummy load with 130 watts of FM. Doing this, we stressed the wiring between the power supplies and the radio. We swapped out several different lengths and gauges of wire and showed the voltage drop across the wire. We showed that the power supply output (measured at the terminals on the supply) only varied by 1/100th of a volt while the voltage at the radio was shown to move by as much as 3 volts depending on the wire. We demonstrated, and everybody got to explore, what happens when we draw 20 amps through a 16 gauge power wire as well as a 14, 12 and 10 gauge wires. Yes, the 16 gauge got warm!

We had a great discussion about the merits and flaws of switcher supplies and linear supplies. One of Doug's two supplies is a 35 amp Astron which also included current metering.

Next month we may be examining commercial and home made VHF antennas for 2 meters. There may be some metering and building involved. Stay tuned.

73 Tadd, KA2DEW

Interesting website

Vintage Data Sheets for coils, transformers and other tube era components. There also is a section about old kites.

<http://www.junkbox.com/electronics/vintagedatasheets.shtml>

RARS August Membership Meeting

Mike Butler K4MBX Earns “Sixty-Four on Six-Four Award”

Virginia Enzor NC4VA



For the third straight month, another “Sixty-Four on Six-Four Award” has been earned by a RARS member! Congratulations go to Mike Butler K4MBX for earning this award and receiving his certificate at the RARS meeting on August 14, 2018.

To merit this recognition, Mike had to make 64 different station contacts on the 146.64 repeater.

When asked if he had any tips for those seeking the award, Mike recommended getting on the repeater throughout the day and throwing out your callsign. He says you never know who will come back to you. That was the secret to his success!

For details on this award and its endorsements, please visit www.rars.org. Hope we can hand out another award in September!

August Meeting, Door Prize winners



Richard (N1FUA), Wade (KK4UGY), Dennis (NC4DK) and Daniel (AG4DB)

RARS Birthdays

Dave	KK4BPM	09/02
Jack	K4WFJ	09/02
Jimmie	KM4DJR	09/02
Ryan	KM4KRV	09/02
Wilbur	WD4RDT	09/03
Andy	KD4FHF	09/04
Mary Jo	K4MJL	09/05
Lou	K4BYN	09/07
Joseph	WB4HXM	09/09
Lewis	N4NCT	09/11
Dean	KN4BED	09/11
Kevin	KN4BEG	09/13
Sheridan	KN4CUS	09/13
Karen	KA9UJH	09/14
Robert	W4MBD	09/16
Sandy	AC1Y	09/16
Bob	AK4TT	09/17
Ken	N4ZBB	09/18
Bill	K4TF	09/19
Charles	W2WNC	09/20
Rod	KI4LSN	09/20
Larry	K4MWE	09/22
Vinny	KN4DJJ	09/24
Steve	KI4YXJ	09/25
Justin	AJ4MJ	09/25
David	AB4MB	09/26
Leon	KB4KSA	09/27
Julie	WE3T	09/27
Gregory	W4GXS	09/27
Chris	KN4DJI	09/27

New RARS Members

Donnell Nichols	KN4ORC
Dale Hicks	KN4OQZ
Robert Lahey	Not Licensed
Rick Ivey, Jr.	KN4ORA
Kevin Capps	KN4OQX

Future Hamfests

A full list of Hamfests can be found at the [ARRL website](#).

10/14/2018 | [Maysville Hamfest](#)

Location: Maysville, NC

Type: ARRL Hamfest

Sponsor: Maysville Hamfest Association

11/18/2018 | [JARSFest](#)

Location: Benson, NC

Type: ARRL Hamfest

Sponsor: Johnston Amateur Radio Society

Website: <http://www.jars.net>

01/05/2019 | [Winston-Salem FirstFest](#)

Location: Winston-Salem, NC

Type: ARRL Hamfest

Sponsor: Forsyth Amateur Radio Club

Website: <http://w4nc.com>

04/20/2019 | [North Carolina State Convention \(Raleigh Hamfest\)](#)

Location: Raleigh, NC

Type: ARRL Convention

Sponsor: RARS

Website: <http://rarsfest.org>

Disaster Preparedness

I recently read the following, “Last year was one of the costliest and most damaging hurricane seasons for natural disasters in U.S. history. Hurricanes Harvey, Irma, and Maria caused an estimated \$265 Billion in damage and impacted individuals, families and businesses throughout the southern states and territories.”

This year, we have seen ragging wildfires in the western states and severe flooding in the northeastern states. Bottomline... disasters happen.

September is National Preparedness Month – an opportunity to assess risks in our geographical area and prepare ourselves and our families. Besides having “go” bags and shelter-in-place survival supplies, we should also review home and auto insurance policy coverage and other recovery considerations.

I encourage all RARS members to visit the <https://www.ready.gov/september> web page to review the online resources (both articles and videos).

September is also an opportunity for RARS members to discuss how we can provide vital communications in the event of a disaster. How can an amateur radio operator find local organizations in need of our expertise and technologies? Perhaps this can be a topic at the upcoming chapter meeting.

73, Charles KM4AM

Future RARS Meeting Topics

Titles, topics, and speakers subject to change.

10/9/2018	RARS Officers nominations RARS Auction	Election committee & Carl Davis, W8WZ
11/13/2018	RARS Officers election and Show and Tell. Bring something of interest in Ham Radio that you would like to show off. Be prepared to talk about it. The time will be limited so everyone can have time to show their item.	Election committee & members
12/11/2018	RARS pot luck Holiday party. Sign up at the RARS website. RARS Officers induction.	Election committee
1/8/2019	The world of high power Medium wave and Shortwave broadcasting	Lauren Libby, W0LD

Spotlight on RARS Net Friends

Virginia Enzor NC4VA, RARS Net Manager



This month's column features two hams who volunteer lots of hours to RARS! Listen for them on the net; you'll enjoy their ragchews.

The RARS net meets at 8:00 PM on the 146.64 repeater every evening! Please check in; we would love to hear about your day.

Spotlight on Chuck Littlewood K4HF

1. Name, Callsign & License class

Charles (Chuck) R. Littlewood K4HF, Extra Class License

2. Year originally licensed

1953

3. How did you get into ham radio?

I was originally licensed in Schenectady, New York as KN2EKS. I received the Extra Class License in 1958. I was one of four Boy Scouts that met once a week for three months in the W2BSH shack learning code and theory. I listened to the 75M AM stations talking on a Philco AM/SW dome table radio. As my physics teacher suggested I road my bike around the neighborhood looking for towers or telephone poles in back yards for antennas. I found a ham a few blocks away who invited me in to see his shack. W2BSH suggested not spending any time or money on equipment until a license was in hand and he would see to that later. He took a week of his vacation and we built an 8 Watt crystal controlled 80/40M handbook transmitter out of a stripped down table radio similar to what I had heard hams talking on. Another ham lent me a Hallicrafters S20R communications receiver for a few months. With an A frame mast and a counterpoise antenna in the back yard I was on the air! After college and work at IBM I eventually came to North Carolina in 1967 with GTE Sylvania and joined RARS in 1970. Living in a condo has made having a good antenna challenging but with the help of Alan, AB4OZ, I have a 75M hamstick dipole on a painters extension pole and can operate 75M SSB around the state. I operated CW mode for the first three years I was licensed and still prefer cw.

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4. What aspects of the hobby currently interest you?

My main interests in ham radio today include participating in RARS Club activities, including RARSfest, and the Quarter Century Wireless Association, a national organization of seasoned hams. I also enjoy helping ham families dispose of estate or other radio equipment by attending hamfests around the region. At times I have done public service, ARES and NTS traffic work.

5. Positions that you hold in RARS or other organizations?

I was RARS Secretary and President, 1972 to 1979 and have continued to serve on the board as the RARS ARRL Liaison. I have been the QCWA Chapter 126 President for the last twelve years. Chapter membership includes about 80 hams from Hickory to Morehead City.

6. Any special awards? (DXCC, WAS, WAC, IOTA, etc)

My awards include Life Membership in RARS, Life membership in ARRL and QCWA. Also obtained WAS, RCC and being a Possum Trotter.

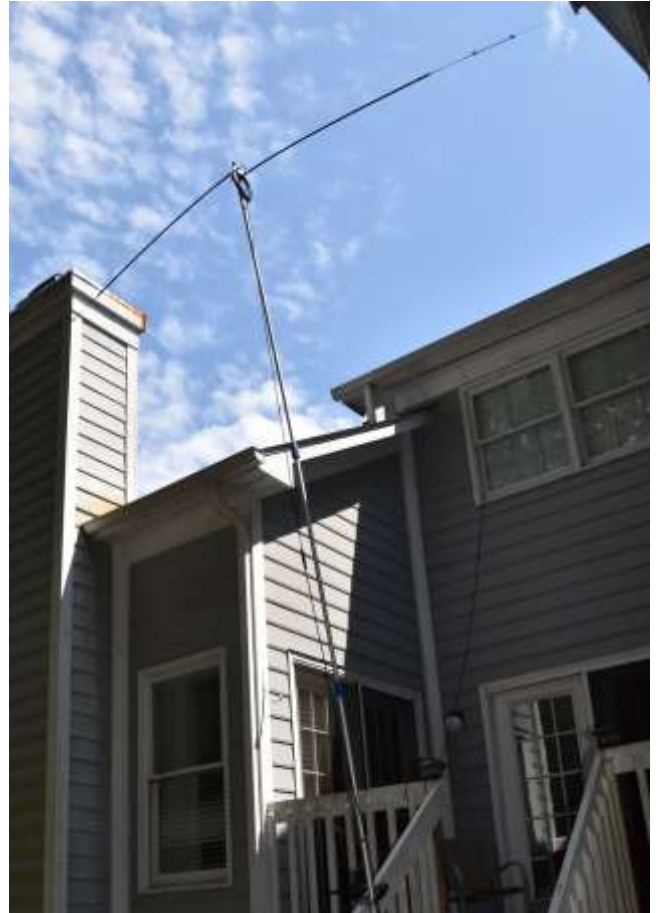


The K4HF shack! Check out the really nice callsign under the light.

Continued from the previous page

7. Any special project you are currently working on?
8. Interests outside of radio?
Outside ham radio I enjoy church activities, gym, attending our grandson's and minor league baseball games, PBS TV and regional travels
9. Words of advice for new hams?
For new hams I suggest attending a licensing class where you can learn and enjoy the experience with others of like mind. As my elmer suggested get the license first then get help with equipment selection and installation and have fun!

Chuck's 75M hamstick dipole
on a painters extension pole.



Spotlight on Tom Lewis N4TL

1. Name, Callsign & License class,
Tom Lewis, N4TL, Extra Class License

2. Year originally licensed
1965

3. How did you get into ham radio?

I used to watch my dad fix radios and TVs. A neighbor gave my grandmother two years of Popular Electronics magazines. She gave them to me. I learned about ham radio from them and ordered a license manual and handbook from the ARRL. My Dad bought a Hallicrafters S-107 for me to listen to.

4. What aspects of the hobby currently interest you?

Chasing DX on all bands and grid squares on six meters. Also Contesting.

5. Positions that you hold or have held in RARS or other organizations.

I am currently the RARS VP and Exciter editor. I am on the board of directors for QCWA chapter 126. I have been in leadership positions in other clubs over the years. I use to run the VHF DXPacket cluster for the South Florida DX association.



The N4TL shack and what a radio station!

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6. Any special awards? (DXCC, WAS, WAC, IOTA, etc.), WAC in 1979.
WAS on 75 meters in 1985. I have many other WAS awards including the current Triple Play WAS.
CQ Worked all Zones in 1991. National parks on the air Honor Roll 2016. I have DXCC on 9 bands, 80 to 6 meters. I have worked and confirmed all DXCC entities. For the ARRL DX Challenge I have 2,225 band countries confirmed. For the VUCC award, I am up to 430 confirmed grids on six meters.
7. Any special project you are currently working on?
I just finished restoring a Heathkit IP-17 high voltage power supply. Next I am going to put up a receiving loop antenna on a small rotor.
8. Interests outside of radio?
Spending time with my family, photography, fixing vintage radios.
9. Words of advice for new hams?
Ham radio has many things that you can do. Find the ones that interest you and have some fun. It's a great hobby.



Tom's restored Heathkit IP-17 HV power supply

JOTA

Will be October 19 - 21, 2018

Get on and say hello the participants

World JOTA-JOTI Registration Now Open

[Registration](#) is open worldwide for Scouting's Jamboree on the Air (JOTA) and Jamboree on the Internet. [JOTA-JOTI](#) take place October 19 - 21 -- always the third weekend of October. JOTA Coordinator Jim Wilson, K5ND, encourages JO-

TA groups to register as soon as possible.

"The sign-up system this year is much simpler," Wilson told ARRL. "There is no need to first register an account at scout.org before signing in." Wilson said JOTA-JOTI will generate "an explosion of communication across the Amateur Radio airwaves and the internet." He anticipates that more than 1 million Scouts and Guides will take part in more than 150 countries. A JOTA-JOTI [Participant's Guide](#) is available.

"JOTA began in 1957 following the World Jamboree that year, when the ham radio operators gathered over coffee and thought about doing the on-the-air part of Jamboree every year," Wilson recounted. This year will mark the 61st JOTA (and the 22nd year of JOTI). "Many JOTA Amateur Radio stations are also starting to use JOTI channels, like [ScoutLink](#), to more readily connect with Scouts around the world," Wilson told ARRL. "Other channels include Skype, YouTube, and social media."

Wilson said once groups have registered, other locations around the world will know to look for them. "Likewise, you'll be able to see at a glance all the rest of the locations from across town to the other side of the Earth," he added.



UN Headquarters Ham Station 4U1UN

On August 22, 2018 after 10 years of silence the UN Headquarters callsign 4U1UN in New York City was heard again. Although the 4U1UN was only active for about 20 min for equipment testing purposes, this is just the beginning of a new chapter. The 4U1UN now has a new club room, an Elecraft K3 radio, an ACOM 2000 amp and a BigIR vertical antenna for 10-40M. More antennas and equipment will follow in order to satisfy more bands and modes. The goal is to get the station active as it was in the past, before my time. The equipment is located at 41st Floor and it is accessed remotely (through RemoteRig boxes) from the Club Room, located at the first floor, where guest operators can get access in an easier way. This is a project that Andy (YO3JR) and I (KO8SCA) started more than 2 years ago while we were planning our participation in WRTC. It was a long and very hard journey with many failures and small victories along the way. Right from the start it was clear that getting the club active again could not be achieved by making a formal request at the UN or knowing someone that works at the UN. This approach was tried by others before us and failed. Many people helped and many people tried to give us a hard time or suggested that we should just give up because others, smarter than us tried and failed. One day, when all is settled, we should tell our story. But now, I'd like to take this opportunity to thank a few people that had a key role in our success. Dave (K1ZZ) through his position at IARU gave our project a legitimate backing and helped us open many doors. Tom (NY2RF) and Norm (W3IZ) helped ensure backing from ARRL as a large amateur radio organization. Jose (CT1BOH) had the missing piece of the puzzle and his help was instrumental in achieving the final goal. The moment Jose got involved in the 4U1UN project we finally felt the victory was ensured. Most of the equipment was donated by Dima (RA9USU) and his friends. The Elecraft K0 remote head was donated by the N2UN (SK) estate with the help of Andy (K2LE). And of course James (K2QI) was involved and helped along the way, as he is the current custodian of the 4U1UN license. A big thank you to all of you that helped us in this project. I hope we can again unite our forces for future endeavors.

73, Adrian KO8SCA
New York

1963

• Twenty-five Cents

Operating an Amateur Radio Station



AMERICAN RADIO RELAY LEAGUE. NEWINGTON, CONN.

Boat Anchors of the 1950s

Minutes

Raleigh Amateur Radio Society

Board Members Meeting

Date | time 07/17/18 @ 7:05 pm | *Meeting called to order by* Carl Davis W8WZ

In Attendance

8 Members

Carl Davis W8WZ

Tara Goodwin W4TSW

Alan Pitegoff AB4OZ

Hank Montgomery K4HM

Greg Seamster KE4PAX

Tom Lewis N4TL

Richard Kroeger N1FUA

Virginia Enzor NC4VA

Approval of Minutes

Quorum present: June Board Meeting Minutes Approved

President Report-Carl W8WZ

Present; no report to give

Vice President Report/Exciter Report-Tom N4TL

Tom reminds the board that the due date for The Exciter articles is August 4th and also that he will be absent from the August member meeting but that Tara (W4TSW) will be in charge of setting up and running the media needed to have Bob (W5OV) with DX Engineering to broadcast his presenta-

tion. He expects it will go well.

Treasurer's Report-Greg KE4PAX

Greg reports that the end of year membership count was 422 and we currently have 312 members that are in current status. At this point he has sent out two email reminders but those that do not renew by August will stop receiving their Exciter. Finally we ended the fiscal year with a 604.00 deficit.

For more detailed information regarding Greg's Treasurers report please contact KE4PAX

Secretary's Report-Tara W4TSW

Present; no report

Directors Reports

Field Day Chair-Bob W4TTX: Not Present, Carl reports that Bob did a great job stepping in last minute to serve as an interim Field Day Chair and that he would like to proceed to cover the role next year also. Carl also states that Bob is considering using Winter Field Day as a QRM test.

FM Repeater Chair-Karl W4CHX: Not Present, Alan(AB4OZ) states that he spoke to Chuck (W3WZN) and that they are not happy with the sensitivity of the 145.13 repeater and they were going to send someone up to check connections and coaxial.

RARSFEST Chair-Tara W4TSW: Tara states that RARSfest meetings will be beginning in October and that we still have not received next year's contract or follow up information from Claudine at the fair-grounds. Herself or Chuck (K4HF) will be reaching out to her soon.

Webmaster-Hank K4HM: Hank reports that the new secure website has been launched and that there were not many issues with the transfer due to his preliminary work prior to the switch, and those that did pop up he has corrected. He states there were some issues on the DeltaForce side that caused emails and hyperlink issues that Hank and DeltaForce have corrected the issues and things should be running smooth again.

Minutes continued from the previous page

Net Manager-Virginia NC4VA: Virginia reports that the nets are going well with high numbers of check ins. She has her next three net participants ready for the August Exciter. The Sixty-Four on Six-Four Award is getting a lot of participation and she hopes to have more awards to present at upcoming meetings.

Food Service Chair-Richard N1FUA: Richard reports that the food service is going well and he has been receiving positive feedback on the snacks being served at the meetings.

Director-at-large-Alan Pitegoff AB4OZ: Present; no report to give

Education Director-Carl W8WZ: Present; no report to give

Youth Director-Murray K4MHM: Not present, no report given

Immediate Past President-Dennis NC4DK: Not present, no report given

Public Information Officer-Charles KM4AMT: Not present, no report given

ARRL NC Section Manager-Karl W4CHX: Not present, no report given

W4DW/W4RNC TRUSTEE-Jeff, AC4ZO: Not present, no report given

Director-at-large-Marty W4MY: Not present, no report given

Public Service Director-John K3RHJ: Not present, no report given

NC QSO Party Chair-Marty W4MY: Not Present; no report given

Director-at-large-Joanne AA3N: Not Present, no report given

ARRL Liaison-Chuck K4HF: Not Present, no report given

Old Business

None.

New Business

QSL Cards: Tom (N4TL) is curious about sending out QSL cards as a club and he is interesting in getting the program back running. He states he will get with Chuck (K4HF) about how to make this happen.

[This is about sending QSL cards to the ARRL outgoing buro].

Minutes continued from the previous page

Award Program: Carl (W8WZ) spoke about having a recognition award that one member can give to another member for various reasons. These would not come through the awards committee but it would be member to member. The board discussed the option to speak more on this to figure out the logistics on who would be the person tracking this, the best way to receive the information, and the best way to launch this idea.

Additional Business/Comments/Announcements

None

Next Meeting

08/20/2018, 2011 Ridge Road at 7pm

Meeting was adjourned at 8:25pm

Minutes

Raleigh Amateur Radio Society

Members Meeting

Date | time 08/14/18 @ 7:30pm | *Meeting called to order by* Carl Davis, W8WZ

In Attendance

The monthly membership meeting of the Raleigh Amateur Radio Society met at the Ridge Road Baptist Church in Raleigh. The meeting was called to order by President Carl, W8WZ, at 7:30 pm.

The pledge of Allegiance was recited

Visitors: Richard Ivory, William Habicht (W3IMD), Brently West

Approval of Minutes

Secretary determined a quorum was present, a motion to accept the minutes of the July 10, 2018 meeting, as published in the Exciter, was made, seconded, and approved.

Continuing Announcements

The RARS dinner takes place monthly on the first Tuesday (next: Sept 4th) at 6:30p.m. at Golden Corral; 6129 Glenwood Ave, Raleigh.

The next board meeting, which is open to all our members, will be Tuesday August 21st at 7pm in the Ridge Road Church conference room. Afterwards many members retire to a nearby restaurant for a quick bite.

Tonight's after-meeting gathering, for any who are interested, will be at the Rudinos located at 3101 Edwards Mill Rd Raleigh 27612

A new ham/Elmer's meeting with new hams, and anyone interested, takes place before each membership meeting at 6pm at the Ridge Road church and is led by Tad (KA2DEW)

Door Prizes

Door Prizes were won by Daniel (AG4DB), Dennis (NC4DK), Wade (KK4UGY), and Richard (N1FUA)

Congratulations to all our August Winners!!!

The club would like to recognize, and thank, Gerald Agliata (W2GLA) for the recent donated door prizes

Vice President Report/Exciter Chair-Tom N4TL

Not Present

Treasurer's Report-Greg KE4PAX

Greg stated that our membership is currently at 323 members and that he reminded the membership that there were still memberships that had not renewed. Greg updated the club on the current budget updates and the Treasurers Report was approved. For those interested in official treasurer reports can contact Greg (KE4PAX)

Secretary's Report-Tara W4TSW

No Report;

Board and Committee Reports

Net Manager-Virginia NC4VA: Virginia gave a reminder about the RARS "Sixty-Four on Six-Four award" and then presented the third award, since the re-launch of this award, to Mike Butler K4MBX. **Congratulation!!!!**

Board and Committee with No Report

Public Service-John K3RHJ

FM Repeater Chair-Karl W4CHX

Food Service-Richard (N1FUA)

ARRL Liaison-Chuck K4HF

Youth Director-Murray K4MHM

Past President-Dennis NC4DK

ARRL Section Manager-Karl W4CHX

Webmaster-Hank K4HM

W4DW/W4RNC Trustee

Director at Large-Alan AB4OZ

Field Day Chair-Bob W4TTX:

Education Director-Carl W8WZ:

RARSFEST Chair-Tara W4TSW:

Field Day Chair-Bob (W4TTX)



AMSTAT OSCAR 7

Old Business

No Old Business

New Business

none

Additional Business/Comments/Announcements

Alan (AB4OZ) cautioned those in attendance to not talk on the radio about being away from their homes for an extended amount of time, or talk about other operators who may be on vacation. And also that the Shelby Ham Fest was fast approaching and would be taking place on Labor Day weekend.

Tara (W4TSW) announced she would be doing a ham radio presentation this upcoming Thursday night at Kings for NerdNite Raleigh and invited any members to attend.

Tech tip of the month was how to cut open a zip tie bag.

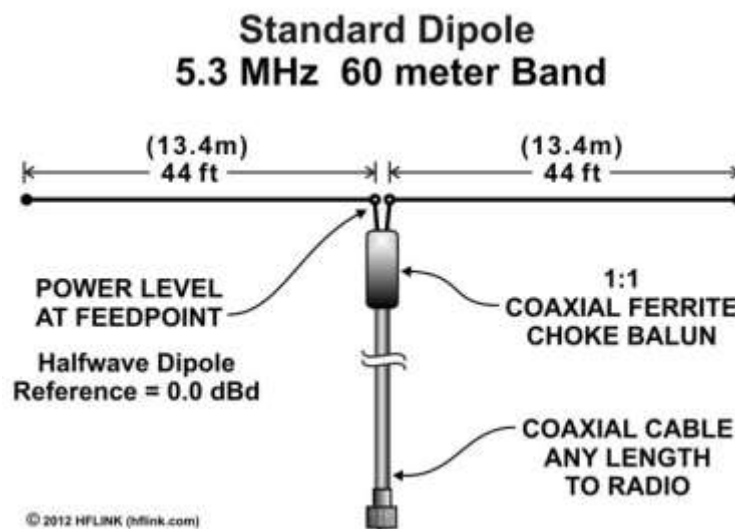
Tonight's presentation: "Linear Amplifiers" by Bob Naumann (W5OV)

Next Meeting

09/11/2018, 2011 Ridge Road at 7pm

Meeting was adjourned at 9:38 pm

Meeting Minutes taken and Submitted by Tara Goodwin W4TSW



Current Public Service Opportunities

To volunteer for a Public Service event please complete the form at the top of this page.

WELCOME TO THE 2018 HAM PUBLIC SERVICE EVENT SIGNUP PAGE. Choose the event(s) for which you would like to volunteer and complete the sign-up form at the top of the page... note... one form for EACH event that you are volunteering. It's also very helpful to indicate what type of assignment you're interested in.

THE 2018 LIST OF PUBLIC SERVICE EVENTS WILL BE POSTED AS CONFIRMED - CHECK BACK FREQUENTLY FOR UPDATED INFORMATION

Events you can sign up for now:

www.rars.org/public-service.php

2018 Bike MS: Historic New Bern Ride

September 8-9, 2018 - Saturday and Sunday - New Bern, NC

The event features 30, 50, 75 and 100 mile rides each day, requiring SAGS, staff Shadows and Rest Stop Hams. The event benefits the National Multiple Sclerosis (MS) Society and typically draws about 2000 riders.

- * Location: Union Point Park, 210 E Front St, New Bern, NC 28560
- * Ham Coordinator: Brian Young (KA9QJT) for Triangle-area Hams, collaborating w/Bruce (KS8L, former N8UTY) of New Bern
- * Website: [Bike MS New Bern Sign Up Genius page - Please Visit!](#)
- * Facebook (Optional): [Bike MS Ham Radio Support group](#)
- * Additional Info: For 2018, the MS Society staff has asked that all their volunteers also sign up using the MS Tour Sign Up Genius page above. There's tab for Hams/SAGs.
- * Do consider making hotel arrangements early. Availability is always limited.
- * **TO VOLUNTEER, FILL OUT THE FORM AT www.rars.org/public-service.php**

2018 Cycle for Life

September 22, 2018 - Saturday - Research Triangle Park, NC

This bicycle event features 30 and 65 mile routes that benefit the Cystic Fibrosis Foundation. SAGS and Rest Stop Hams are needed.

- * Location: The Frontier, 800 Park Offices Dr, Research Triangle Park, NC 27709
- * Ham Coordinator: Wallace Smith (KJ4UKV)
- * Website: [Raleigh Cycle For Life](#)
- * **TO VOLUNTEER, FILL OUT THE FORM AT www.rars.org/public-service.php**

RARS Classifieds

Copied from www.rars.org/classifieds.php

The items below were listed within the last 30 days on the RARS website.

Collins Near-Mint S-Line for Sale from Local Collector. Late model RE (round emblem) units sold individually or together.

Posted August 30th, 2018 by: ROLA

Contact: Robwlahey@gmail.com

Raleigh Collins collector returning to Saudi Arabia for IT assignment (mainframe banking systems: Riyadh and Dammam).

Due to time constraints, seller will be forced to auction on E-bay in a few days — but prefers to offer first to local hams who can give them a good home. All units in climate-controlled storage for the past few years:

1: Collins near-mint 75S-3C S-Line receiver, late production s/n #30292. Works well on all bands. Spare crystal deck allows for expanded operation in the newer 30–17–12 meter WARC bands. Standard 2.1 kHz mechanical SSB filter & 120 volt ac power cord. WARC crystals & CW filters not included. Recently bench tested. \$1,600.

2: Matching, near-mint & rare 32S-3A S-Line extended coverage (80-10 m + WARC bands) transmitter. Transceive capable with the -3C receiver above. Requires slow-start & alignment. WARC crystals & power supply not included. \$3,500 if sold separately, \$3,000 if sold with -3C receiver above.

3: Near-mint KWM-2A 80-10 meter + WARC bands transceiver. Requires slow-start & alignment. WARC crystals & power supply not included. \$2,000.

4: Near-mint 51-S1 general coverage receiver. Contains internal power supply. Requires slow-start & alignment. Asking \$1,700.

Contact me at Robwlahey@gmail.com

73, Rob

RARS Classifieds continued

572B tubes FREE

Posted August 22nd, 2018 by: WD4MB

Contact: mbaldock@nc.rr.com

FREE: I have a NOS Svetlana 572B tx tube, tested, burned in, but unused tx tube still in the box, and one Penta Labs used 572B tx tube. Penta labs tube has quite a few hours on her, but she is still good for >300 watts out last time I checked. In two days, these units will be trashed. The Svetlana will be broken open and reverse engineered before e-waste. The Penta does not have a chance. If interested, call me at 919-749-9629. Please, no look at--please take, as they are FREE. Friday, they die. I work at the NC State campus in Raleigh. mbaldock@nc.rr.com

Thank you,

Mike

WD4MB

12v 7 to 15 amp power supply/ WANTED

Posted August 19th, 2018 by: WZ0Q

Contact: wz0q@outlook.com

Wanted a 12 volt 7 to 15 amp power supply.

Reasonable priced.

Dennis

wz0q

919-413-5998

E F Johnson Viking Ranger I Transmitter

Posted August 9th, 2018 by: K4HF

Contact: k4hf@arrl.net

Radio has had TLC. T/R Relay, mike and Documentation included. Transmitter is working and in above average condition. \$275 Contact me by e mail, preferred, or (919) 872-6555 Thanks, Chuck